

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: HALO COMMERCIAL

Report Number: P583784

Luminaire Tested: **HC810D010-HM80520930-81NDH**

Issue Date: 10/21/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P583784  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-2)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 10/21/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HC810D010-HM80520930-81NDH  
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" NARROW DISTRIBUTION, HAZE TRIM  
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 948.1 lumens  
Efficiency: N/A  
Efficacy: 95.8 lumens/watt  
Spacing Criteria (0/90/45): 0.42 / 0.42 / 0.57  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

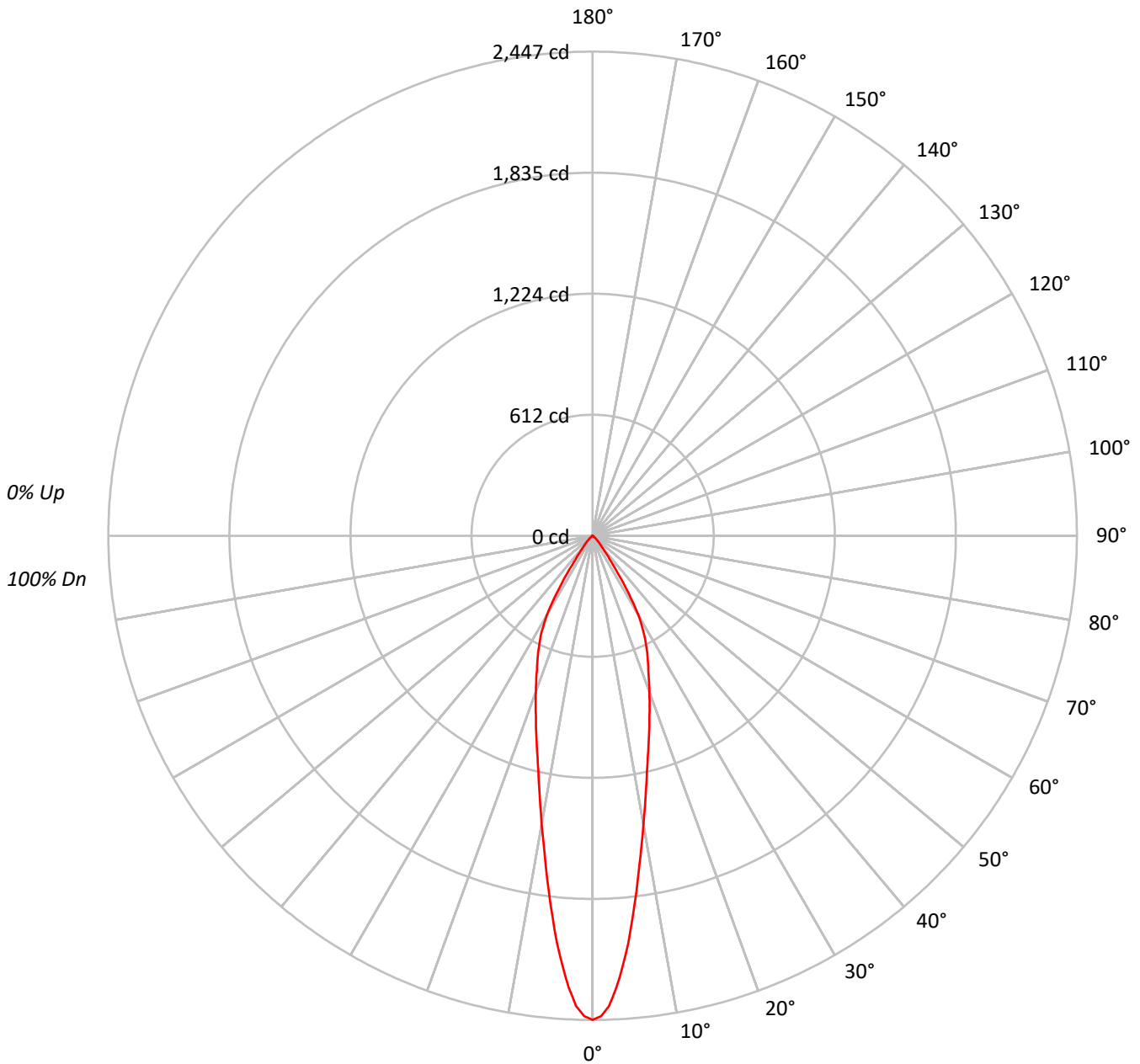
Input Watts (W): 9.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20				
RC	80				70				50				30				10			0	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			
1	114	112	109	107	112	109	107	106	105	104	102	102	100	99	98	97	96	95			
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	92	91	89			
3	104	99	94	91	102	97	93	90	95	91	88	92	90	87	90	88	86	84			
4	100	93	88	84	98	92	87	84	90	86	83	88	85	82	86	83	81	80			
5	96	88	83	79	94	87	82	79	86	81	78	84	80	77	82	79	77	75			
6	92	84	78	75	90	83	78	74	81	77	74	80	76	73	79	76	73	72			
7	88	80	74	70	87	79	74	70	78	73	70	77	73	70	76	72	69	68			
8	84	76	71	67	83	75	70	67	74	70	66	73	69	66	72	69	66	65			
9	81	72	67	64	80	72	67	63	71	66	63	70	66	63	69	66	63	62			
10	78	69	64	61	77	69	64	61	68	63	60	67	63	60	67	63	60	59			

**AVERAGE LUMINANCE (cd/sqm):**

	0°
0°	75444
5°	63917
10°	46376
15°	34826
20°	27476
25°	22167
30°	16425
35°	6655
40°	2806
45°	1505
50°	676
55°	344
60°	216
65°	161
70°	126
75°	83
80°	124
85°	248



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	177.3	18.7
10°-20°	306.4	32.3
20°-30°	296.3	31.2
30°-40°	130.1	13.7
40°-50°	28.1	3.0
50°-60°	6.3	0.7
60°-70°	2.2	0.2
70°-80°	0.8	0.1
80°-90°	0.7	0.1
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	779.9	82.3
0°-40°	910.0	96.0
0°-60°	944.5	99.6
0°-90°	948.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	948.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2447	
5°	2065	177
15°	1091	306
25°	652	296
35°	177	130
45°	34	28
55°	6	6
65°	2	2
75°	1	1
85°	1	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2446.6
1°	2428.3
2°	2378.3
3°	2288.1
4°	2180.3
5°	2064.9
6°	1938.8
7°	1812.0
8°	1693.0
9°	1582.4
10°	1481.1
11°	1385.3
12°	1299.4
13°	1221.2
14°	1152.1
15°	1090.9
17.5°	953.5
20°	837.3
22.5°	735.3
25°	651.5
27.5°	566.3
30°	461.3
32.5°	313.4
35°	176.8
37.5°	104.2
40°	69.7
42.5°	49.3
45°	34.5
47.5°	22.5
50°	14.1
52.5°	8.4
55°	6.4
57.5°	4.9
60°	3.5
62.5°	2.8
65°	2.2
67.5°	1.4
70°	1.4
72.5°	0.7
75°	0.7
77.5°	0.7
80°	0.7
82.5°	0.7



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**CANDELA DISTRIBUTION (continued):**

0°  
90° | 0.0



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— 0°-180°







85°	0.7
87.5°	0.7



(END OF REPORT)